

The listing of claims will replace all prior art versions, and listings, of claims in the present application:

LISTING OF THE CLAIMS:

Claim 1 (Currently Amended) A pyrotechnic composition for producing IR-radiation characterised in that comprising

an oxidation agent selected from fluorinated spherical, carbocyclic cage molecules or and polymers with such fluorinated cage molecules as monomers are included as an oxidation agent, and

a fuel selected from a halophilic metal combining combined with fluorine in an exothermic reaction or such and a metal alloy thereof is contained as a fuel, said pyrotechnic composition produces IR radiation.

Claim 2 (Currently Amended) A pyrotechnic composition according to claim 1 characterised in that wherein said oxidizing agent is a fluorinated spherical, carbocyclic cage molecule[[s]] of the general formula (CR^F)_n with R^F = C_mF_{2m+1} or a polymer[[s]] with such a fluorinated cage molecule[[s]] as a monomer[[s]] are included as an oxidation agent, wherein n is a natural number and m is a natural number including 0.

Claim 3 (Currently Amended) A pyrotechnic composition according to claim 2 characterised in that wherein m = 0 or 1.

Claim 4 (Currently Amended) A pyrotechnic composition according to claim 2 or claim 3 characterised in that wherein n = 4, 6, 8, 20, 60 or 70.

Claim 5 (Currently Amended) A pyrotechnic composition according to claim 4
characterised in that wherein said oxidation agent is one of (CF)₄, C₄(CF₃)₄, (CF)₆,
C₆(CF₃)₆, (CF)₈, C₈(CF₃)₈ and[[/or]] (CF)₂₀ is included as an oxidation agent.

Claim 6 (Withdrawn) A pyrotechnic composition according to claim 1
characterised in that polyfluorofullerenes of the general formula C_{60+2n}F_{2m} or polymers
with such polyfluorofullerenes as monomers are included as an oxidation agent, wherein
n is a natural number including 0 and m is a natural number.

Claim 7 (Withdrawn) A pyrotechnic composition according to claim 6
characterised in that C₆₀F₄₈ and/or C₆₀F₆₀ is included as an oxidation agent.

Claim 8 (Withdrawn) A pyrotechnic composition according to claim 1
characterised in that polyfluorofullerenes of the general formula C_{60+2n}R¹_mR²_bZ_y or
polymers with such polyfluorofullerenes as monomers are included as an oxidation agent,
wherein R¹ is a straight or branched hydrocarbon chain or an aromatic radical with up to
100 carbon atoms, R² is a straight or branched fluoroalkyl with up to 100 carbon atoms
and Z is a hydrogen, fluorine, or chlorine atom, and wherein n, m and y are natural
numbers including 0 and b is a natural number.

Claim 9 (Currently Amended) A pyrotechnic composition according to claim 1
characterised in that wherein the fuel is a metal selected from the group of the metals

lithium, beryllium, magnesium, zinc, calcium, strontium, barium, boron, aluminium, titanium, zirconium, hafnium or and a mixture or alloy of said metals.

Claim 10 (Currently Amended) A pyrotechnic composition according to claim 9 characterised in that wherein the fuel is magnesium.

Claim 11 (Withdrawn) A pyrotechnic composition according to claim 1 characterised in that the molar stoichiometry of the pyrotechnic composition complies with the formula

$$\Phi / M \leq w$$

wherein Φ is the number of fluorine atoms per fluorinated spherical carbocyclic cage molecule or monomer, M is the number of metal atoms and w is the maximum degree of oxidation of the metal.

Claim 12 (Withdrawn) A pyrotechnic composition according to claim 1 characterised in that the oxidation agent is sublimated on to the metal.